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Abstract Submitted
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Suggested title of session
in which paper should be placed
General Theory of Electronic Structure

Relativistic Configuration Interaction Calculations of the $2s$ - $2p_{3/2}$ Transitions in Highly-Ionized Uranium.* K. T. CHENG, M. H. CHEN, Lawrence Livermore National Lab., W. R. JOHNSON, U. of Notre Dame. – A large-scale, relativistic configuration interaction (CI) method with B-spline basis sets is used to calculate the $2s$ - $2p_{3/2}$ transition energies for highly-ionized Li-like, Be-like, B-like, and C-like uranium. These CI calculations are based on the relativistic no-pair Hamiltonian and include contributions from the Coulomb and the retarded Breit interactions. Quantum electrodynamic corrections are also calculated nonperturbatively in external Dirac-Slater potentials. Our results are in very good agreement with recent high precision experimental data taken at the SuperEBIT facility.
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(x) Prefer Poster Session

Submitted by

Kwok-Tsang Cheng
Lawrence Livermore National Lab.
P. O. Box 808, L-59
Livermore, CA 94550

Phone: (510) 423-8659
FAX: (510) 422-5102
E-mail: ktcheng@llnl.gov